

IN THE CLAIMS

The status of each claim in the present application is listed below.

Claims 1-37: (Canceled).

38. (New) An amphipathic glycopeptide, the amino acid sequence of which comprises an N- terminal opioid message sequence, a C-terminal helical address sequence, and a linker sequence between the message sequence and the helical address sequence, wherein

the C-terminal helical address sequence has a length of nine amino acids, and at least one of the amino acid residues of the peptide is glycosylated.

39. (New, Withdrawn) The glycopeptide of Claim 38, wherein the N-terminal opioid message sequence is Y-t-G-F- or Y-a-G-F-.

40. (New, Withdrawn) The glycopeptide of Claim 38, wherein the N-terminal opioid message sequence is Y-t-G-F-L-P-.

41. (New, Withdrawn) The glycopeptide of Claim 38, wherein the N-terminal opioid message sequence is Y-t-G-F-L-pA-.

42. (New) The glycopeptide of Claim 38, wherein the N-terminal opioid message sequence is Y-t-G-F-L-G-G-.

43. (New) The glycopeptide of Claim 38, which is a glycosylated enkephalin.

44. (New) The glycopeptide of Claim 38, which is a glycosylated endorphin.

45. (New) The glycopeptide of Claim 38, which adopts a helical conformation in the presence of a lipid bilayer.

46. (New) The glycopeptide of Claim 38, which is substantially non-helical in water in the absence of a lipid bilayer.

47. (New) The glycopeptide of Claim 38, which is substantially non-helical in water in the absence of a lipid bilayer and adopts a helical conformation in the presence of a lipid bilayer.

48. (New) The glycopeptide of Claim 38, wherein one amino acid residue is glycosylated.

49. (New) The glycopeptide of Claim 38, wherein two amino acid residues are glycosylated.

50. (New) The glycopeptide of Claim 38, which comprises at least one serine residue that is glycosylated.

51. (New, Withdrawn) The glycopeptide of Claim 38, which comprises 2 serine residues that are glycosylated.

52. (New) The glycopeptide of Claim 38, which is glycosylated with a glycosyl unit having at most 8 saccharide units.

53. (New) The glycopeptide of Claim 38, which is glycosylated with a glycosyl unit having at most 4 saccharide units.

54. (New) The glycopeptide of Claim 38, which is glycoslated with a glycosyl unit having at most 2 saccharide units.

55. (New) The glycopeptide of Claim 38, which is glycoslated with a glycosyl unit having at most 1 saccharide unit.

56. (New) The glycopeptide of Claim 38, which contains one serine glucoside residue.

57. (New; Withdrawn) The glycopeptide of Claim 38, which contains 2 serine glucoside residues.

58. (New) The glycopeptide of Claim 38, which comprises at least 14 amino acid residues.

59. (New) The glycopeptide of Claim 38, which comprises at least 15 amino acid residues.

60. (New) The glycopeptide of Claim 38, which comprises at least 17 amino acid residues.

61. (New) The glycopeptide of Claim 38, which comprises at least 19 amino acid residues.

62. (New) The glycopeptide of Claim 38, which comprises at most 60 amino acid residues.

63. (New) The glycopeptide of Claim 38, which has at most 5% helicity as measured by circular dichroism in water and at least 10% helicity in the presence of a lipid bilayer.

64. (New) The glycopeptide of Claim 38, which crosses the blood-brain-barrier.

65. (New) The glycopeptide of Claim 38, which is selective for at least one receptor selected from the group consisting of the delta opioid receptor, mu opioid receptor and kappa opioid receptor.

66. (New) A pharmaceutical composition comprising the glycopeptide of Claim 38 and at least one pharmaceutically acceptable carrier and/or excipient.

67. (New) A method of relieving pain, comprising administering an effective amount of the glycopeptide Claim 38 to a subject in need thereof.

68. (New) A method of providing analgesia, comprising administering an effective amount of the glycopeptides of Claim 38 to a subject in need thereof.

69. (New) A method of treating anxiety, depression, obesity, anorexia nervosa, phobias, schizophrenia, Parkinson's disease and Alzheimer's disease, comprising administering an effective amount of the glycopeptides of Claim 38 to a subject in need thereof.